

SPR 49-1 ✓

1984 INSECT DAMAGE  
AERIAL SURVEY AGREEMENT

USDA-FOREST SERVICE-REGION 6  
STATE OF OREGON-DEPARTMENT OF FORESTRY

## Introduction

This is to clarify and document operational aspects of the survey to be used by personnel doing and responsible for the survey.

## Objectives

Conduct a cooperative aerial survey of all forested lands in Oregon to detect and record insect damage for 1984.

The survey will be conducted in the most cost effective and professional manner. This year East Side forest lands and any portions of West Side forest lands that may be deemed necessary and has been mutually agreed upon will be surveyed. The survey will take place generally between July and the first part of September.

## Background

A State-wide aerial survey has been conducted jointly by the USDA Forest Service and Oregon Department of Forestry since 1947. All forested lands were covered using one survey crew. Two survey crews were started in the late 1960's in order to speed up the survey and get data to the landowners quicker. Priorities as to what areas of the State were to be surveyed based upon past and expected damage began in the late 1970's. Priority setting as to what areas in the State are to be surveyed continues in relation to damage and particularly current reduced budgets.

## Required Observer Skills

Two experienced observers will be required in the plane at all times. A third trainee observer may be included as appropriate.

The observers must be able to: 1. ride and map insect damage in a small airplane for up to 3 to 4 hours at a time, 2. not get air sick to the point of not being able to perform the necessary tasks or interfere with other survey crew members, 3. distinguish the hue of colors (no color deficiencies), 4. identify tree and insect species and record same on maps in the plane, 5. assist the pilot in navigation, and 6. otherwise be compatible with the survey team and objectives of the survey.

## Required Pilot Skills

The pilot must have the experience or adaptability to fly at the required low levels, keep the plane on precise flight lines, and otherwise assist in the objectives of the survey.

## Flying Criteria

Survey plans (i.e. area to be surveyed, flight lines, methods of mapping, weather conditions, etc.) will be jointly discussed and mutually agreed upon prior to take off and in the air by the observers and pilot.

General flight plan of the area to be surveyed will be filed with the appropriate State station each survey period (AM, PM) by the pilot. The pilot in addition will report to the nearest assigned State station the aircraft position and direction approximately every 30 minutes or other appropriate times.

The pilot has final responsibility and authority on the operation of the aircraft (i.e. flying conditions, mechanical, etc.) and reporting flight plans and locations. The observers may express any ideas or concerns about the aircraft and its use with the pilot.

If the State plane is committed to the insect aerial survey it could be called for a short duration for use on fires or aerial photo missions. Back-up planes will be used in cases when the State plane is being used for several days.

There will be no single engine operations at night outside an airport traffic area.

Forest Service observers are not permitted to participate in flights under IFR conditions. All flights involving Forest Service observers must follow procedures and conditions as outlined in the Forest Service Air Operations Handbook.

State of Oregon personnel will follow State procedures.

Cooperators agrees to supply the following services:

**USFS**

**OSDF**

A. Personnel

1. Minimum of 1 observer in aircraft at all times.  
(2 experienced and 2 trainees available)
2. NA
3. Personnel to prepare final maps and data.

B. Equipment and supplies

1. NA
2. NA
3. Survey maps as appropriate.
4. Provide ODS final Nat. For. maps with survey data as per attached list and deadline.
5. Provide ODF with computerized survey data by November 15.
6. Flight suits, field boots, ear plugs or other hearing protection-aides, brown lens eye glasses for observers, etc. as appropriate.
7. NA

C. Payment of aircraft, pilot, travel expenses

1. FS will reimburse ODF percentage of flying costs prorated upon acres of responsibility.

A. Personnel

1. Minimum of 1 observer in aircraft at all times.  
(1 experiences and 1 trainee available)
2. 1 experienced survey pilot at all times (ODF or other FS approved).
3. Limited personnel to assist as needed and available on preparation of final maps and data.

B. Equipment and supplies

1. State Cessna 206 plane or other FS approved plane.
2. Back up FS approved Cessna 206, 210 or other FSs approved plane.
3. Survey maps as appropriate.
4. NA
5. NA
6. Flight suits, field boots, ear plugs or other hearing protection-aides, brown lens eye glasses for observers etc. as appropriate.
7. Survival kit for 6 people in planes.

C. Payment of aircraft, pilot, travel expenses

1. ODF will pay percentage of flying costs prorated upon acres of responsibility.

1984 AERIAL SURVEY  
NATIONAL FOREST, B.L.M., & OTHER MAPS NEEDED  
FOR O.D.F. DISTRICTS AND SALEM STAFF

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N $\frac{1}{2}$ Wallowa-Whitman	6 Maps
S $\frac{1}{2}$ Wallowa-Whitman	5 Maps
N $\frac{1}{2}$ Umatilla	6 Maps
S $\frac{1}{2}$ Umatilla	6 Maps
N $\frac{1}{2}$ Malheur	6 Maps
S $\frac{1}{2}$ Malheur	6 Maps
E $\frac{1}{2}$ Ochoco	5 Maps
W $\frac{1}{2}$ Ochoco	5 Maps
Deschutes	6 Maps
Winema	6 Maps
Fremont	6 Maps
Mt. Hood	6 Maps
Warm Springs Ind. Res.	4 Maps
Kinzua-Waterman (ST.)	4 Maps
Klamath B.L.M.	<u>4 Maps</u>
TOTAL	81 Maps

Plus any special survey maps as appropriate.

NOTE: USFS shall supply ODF the above maps no later than 30 days after completion of that portion of the survey.

Oregon State Department of Forestry

LeRoy N. Kline Date July 3, 1984  
LeRoy Kline, Director  
Insect and Disease Management

John R. Prukop Date 7-3-84  
Jack Prukop, Air Operations

USDA, Forest Service

Paul Buffam Date 7/13/84  
Paul Buffam, Director  
Forest Pest Management

Robert J. McDonald Date 7/13/84  
Robert J. McDonald  
Director, Aviation & Fire Management

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